

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : GORDON et. al.

Serial No.: 09/869,198

Art Unit:

Filed

: June 21, 2001

Examiner:

For

: VASCULAR ENDOTHELIAL GROWTH FACTOR-X

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner For Patents, Washington, D.C. 20231 on

February 19, 2002
(Date of Deposit)

Myra H. McCormack (Name of applicant, assignee, or Registered Representative)

February 19, 2002

(Date of Signature)

Commissioner for Patents Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §\$1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 C.F.R. §1.56(b).

Applicant(s) reserve(s) the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this

RECEIVED
MAY 2 1 2002

information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist.

 \boxtimes In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified national application (other than a continued prosecution application under §1.53(d)), within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of a request for continued examination under §1.114, no additional fee is required. П In accordance with §1.129(a), this Information Disclosure Statement is being filed in connection with \(\square\$ the first or second After Final Submission, therefore: \Box Statement in Accordance with §1.97(e) (attached); or П Please charge Deposit Account No. 10-0750/ the fee of \$180.00 as set forth in $\S1.17(p)$. In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311, or an action that otherwise closes prosecution and that it is accompanied by one of:

• •	
· ,	Statement in Accordance with §1.97(e) (attached) or Please charge Deposit Account No. 10-0750/ the fee of \$180.00 as set forth in §1.17(p).
	In accordance with §1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311 but before the payment of the Issue Fee. Applicant(s) hereby petition(s) for consideration of this Information Disclosure Statement. Included are: Statement in Accordance with §1.97(e) as set forth below and the fee of §180.00 as set forth in §1.17(p).
	Copies of each of the references listed on the attached Form PTO-1449 are enclosed herewith. Copies of references listed on the attached Form PTO-1449 are enclosed herewith EXCEPT THAT:
	<pre>In view of the voluminous nature of references [list as appropriate], and the likelihood that these references are available to the Examiner, copies are not enclosed herewith. If any of the foregoing publications are not available to the Examiner, Applicant will endeavor to supply copies at the Examiner's</pre>
	request. There are no listed references which are not in the English language.

•
The relevance of those listed references which are not
in the English language is as follows: $WO98/02543$ is referenced
in Japanese with English Abstract attached.
Attached are copies of search report(s) from
corresponding patent application(s), which are listed on the
attached Submission Under MPEP 609 D.
Attached are the following non-published pending
patent applications which may be deemed relevant, which are
listed on the attached Submission Under MPEP 609 D.
listed on the attached Submission onder MrEr 009 D.
Please charge any deficiency or credit any overpayment to
Deposit Account No. 10-0750/JAB-1463/MHM. This form is
submitted in triplicate.
Respectfully submitted,
Myra H. McCormack
Reg \(\int \text{No. 36602} \) Attorney for Applicants
Johnson & Johnson
One Johnson & Johnson Plaza New Brunswick, NJ 08933-7003

(732) 524-6932 DATED: February 19, 2002

MAY 2 1 2002

Approved of less than the less Under the Paperwork Reduction Act of 1995, no persons are required to respond to

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary) Sheet 1 of 3

YARG OND WHILL HUMBEL
09/869,198
6/21/2001
Gordon, et. al.
JAB-1463

		U.S. Patent Document		cument			
Examiner Initials	Cite No.1	Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document mm-dd-yyyy	Pages, Columns, Lines, where relevant passages or relevant figures appear	
					T		
	I, A		=				
			FORFI	GN PATENT DOCUMENTS			

Examiner Initials	Cite	Foreign Office ³	Patent Docume	ent indCode ⁵	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document mm-dd-yyyy	Pages, Columns, Lines, where relevant passages or relevant figures appear	T ⁶
	1	wo	00/37641	A2	Janssen Pharmaceutica NV	06-29-2000		
	2	wo	99/47677	A2	Genentech, Inc.	09-23-1999		
1	3	wo	99/37671	A1	Eli Lilly and Company	07-29-1999		
	4	wo	98/07832	A1	Ludwig Institute for Cancer Research	02-26-1998		
	5	wo	98/24811	A2	Zymogenetics, Inc.	06-11-1998		
	8	EP	0984063	A2	Eli Lilly and Company	03-08-2000		
	7	wo	98/02543	A1	Chugai Research Institute for Molecular Medicine, Inc.	01/22/1998	Japanese Patent with English Abstract	

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark

DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

¹ Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. s Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.



MAR -0 4 2002

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)
Sheet 2 of 3

a collection of information unless it displays a valid. OMB control number.						
Application Number	09/869,198					
Filing Date	6/21/2001					
First Named Inventor	Gordon, et. al.					
Group Art Unit						
Examiner Name						
Attorney Docket Number	JAB-1463					

FOREIGN PATENT DOCUMENTS

		Foreign	Patent Docum		Name of Patentee or	Date of Publication of Cited Document	Pages, Columns, Lines, where relevant	
Examiner Initials	Cite No. ¹	Office ³	Number ⁴ K	indCode ⁵	Applicant of Cited Document	mm-dd-yyyy	passages or relevant figures appear	T⁵
	8	EP	0506477	B1	Merck & Co., Inc	06/23/1999		
	9	wo	9524473	A1	Human Genome Sciences, Inc.	09/14/1995		
	10	wo	9828621	A1	Ludwig Institute for Cancer Research	07/02/1998		
	11	wo	9013649	A1	Genetech, Inc.	11/15/1990		
	12	EP	0476983	B1	Merch & Co., Inc.	03/15/2000		<u> </u>
	13	EP	0550296	A2	Terumo	07/07/1993		<u> </u>
	14	wo	9013649	A1	Genentech, Inc.	11/15/1990		
	15	wo	9626736	A1	Ludwig Institute for Cancer Research	09/06/1996		<u> </u>
	16	wo	9849300	A2	Collateral Therapeutics	11/05/1998		
	17	wo	9836075	A1	Genentech Inc.	08/20/1998		
	18	wo	9011084	A1	The Regents of the Univ of California	10/04/1990		<u> </u>
	19	wo	,9824811	A2	Zymogenetics, Inc.	06/11/1998		<u></u>
	20	wo	9810071	A1	Technion Research & Development	03/12/1998		
	21	wo	9807,832	A1	Ludwig Institute for Cancer Research	02/26/1998		
	22	wo	9705250	A2	Helsinki University Licensing LTD	02/13/1997		
	23	wo	- 9639421	A1	Human Genome Sciences, Inc.	12/12/1996		
	24	wo	9639515	A1	Human Genome Sciences, Inc.	12/12/1996		
	25	wo	9102058	A1	California Biotechnology Inc.	02/21/1991		
	26	wo	9816551	A2	Genentech Inc.	04/23/1998		<u></u>
	27	wo	9627007	A1	AMRAD Operations Pty. LTd.	09/06/1996		

F	Date
Examiner	
Signature	Considered
Signature	in Lance case Draw line through eitation if not in conformance

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office. Washington. DC 20231.

DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

¹ Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.



MAY 2 1 2002

PTO/SB/08A (08-00)

U.S. Patent and Trademark Under the Paperwork Reduction Act of 1995, no persons are required to respond to substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary) Sheet 3 of 3

a collection of information unless it displays a	collection of information unless it displays a valid OMB control number."				
Application Number	09/869,198				
Filing Date	6/21/2001				
First Named Inventor	Gordon				
Group Art Unit					
Examiner Name					
Attorney Docket Number	JAB-1463				

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
-	ا ا	Include name of the author (in CAPITOL LETTERS), title of the article (when appropriate), title of the item	T ²
Examiner's nitials*	Cite No.1	(book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher. city and/or country where published	T
	28	AUCHEN, M.G., et al., "Vascular endothelial growth factor (VEGF-D) is a ligand for the tyrosine kinases VEGF receptor 2 (Flkl) and VEGF receptor 3 (Flt4), Proc. Natl. Acad. Sci, USA, 1998 95:548-553.	
	29	CHRISTINGER, H.W., et al., "Crystallization of the receptor binding domain of vascular endothelial growth factor," Proteins: Structure, Function and Genetics 1998 26:353-357	
	30	KORFF, T., et al. "Integration of Endothelial Cells in Multicellular Spheroids Prevents Apoptosis and Induces Differentiation", The Journal of Cell Biology 1998 143:1341-1352	
	31	MULLER, Y.A., et al. "Vascular endothelial growth factor: Crystal structure and functional mapping of the kinase domain	
	32	receptor binding site", Proc. Natl. Acad. Sci. USA 1997 94:7192-7197. NEUFELD, G., et al. "Vascular endothelial growth factor (VEGF) and its receptors", FASEB 1999 13:9-22	
	33	OEFNER, C., et al. "Crystal structure of human platelet-derived growth factor BB, EMBO Journal, 1992 11:3921-3926	
· · · · · · · · · · · · · · · · · · ·	34	PASSANTI, A., et al. "A Simple Quantitative Method for Assessing Angiogenesis and Antiangiogenic Agents Using	
		Reconstituted Basement Membrane, Heparin, and Fibroblast Growth Factor', Laboratory Investigation 1992 67:519-528	
	35	ROCCHIGIANI, M., et al., "Human FIGF: Cloning, Gene Structure, and Mapping to Chromosome Xp22.1 between the PIGA and the GRPR Genes", Genomics 1998 47:207-216	
	36	SIEMEISTER, G., et al. "Expression of Biologically Active Isoforms of the Turmor Angiogenesis Factor VEGF in Escherichia coli", Biochem. 1996 222:249-255	
	37	SOKER, S., et al., "Neuropilin-1 Is Expressed by Endothelial and Tumor Cells as an Isoform-Specific Receptor for Vascular Endothelial Growth Factor", Cell 1998 92:735-745	
	38	TAKAHASHI, Y., et al. "Expression of Vascular Endothelial Growth Factor and its Receptor, KDR, Correlates with Vascularity, Metastasis, and Proliferation", Cancer Research 1995 55:3964-3968.	
	39	TISCHER, E., et al., "The Human Gene for Vascular Endothelial Growth Factor", J. Biol. Chem. 1991 266:11947-11954.	
	40	VON HELINE, G., et al. "A New Method for Predicting Signal Sequence Cleavage Sites", Nucleic Acid Res. 1986 14:4683-4690.	-
-	41	Chien, C., et al. 'The two-hybrid system: A method to identify and clone genes for proteins that interact with a protein of interest', Proc. Nat. Acad. Sci USA, 1991 Vol. 88:9578-9582	
	42	Cooney, M., et al. "Site-Specific Oligonucleotide Binding Represses Transcription of the Human c-myc Gene in Vitro", Science, 1988 Vol. 241:456-459	
	43	Beal, P.A., et al., "Second Structural Motif for Recognition of DNA by Oligonucleotide-Directed Triple-Helix Formation", Science 1991 Vol. 251:1360-1363	
	44	Kim, K. J., et al, "Inhibition of vascular endothelial growth factor-induced angiogenesis suppresses turnour growth in vivo", Nature 1993 Vol. 362:841-844	
	45	Kohler R. & Milstein C., "Continuous cultures of fused cells secreting antibody of predefined specificity" Nature 1975 Vol. 256:495-497	
	46	Lockhart, et al., "Expression monitoring by hybridization to high-density oligonucleotide arrays", Nature Biotechnology 1996 Vol. 14:1675-1680	
	47	McNeil, P.L., et al., "Growth Factors Are Released by Mechnically Wounded Endothelial Cells," The Journal of Cell Biology, 1989 Vol. 109:811-822	
	48	Lee, J.S., et al, "Complexes formed by (pyrimidine)n (purine)n DNAs on lowering the pH are three-stranded", Nucleic Acids Research 1979 Vol. 6:3073-3091	
	49	Folkman, J., "Angiogenesis in cancer, vascular, rheumatoid and other disease", Nature Medicine, 1995 1:27-31	
	50	Jakeman, L.B., et al "Binding Sites for Vascular Endothelial Growth Factor Are Localized on Endothelial Cells in Adult Rat Tissue," J. Clin. Invest. 1992, Vol. 89:244-253	
	51	Plate, K. H., et al, "Vascular endothelial growth factor is a potential turnour angiogenesis factor in human gliomas in vivo", Nature 1992 Vol. 359:845-848	
	52	GAJDUSEK, C. M., "Injury-Induced Release of Basic Fibroblast Growth Factor From Bovine Aortic Endothelium", Journal of Celtular Physiology 1989 139:570-579	
	53	Ferrara, N., et al., "Vascular endothelial growth factor: Basic biology and clinical implications", Regulation of Angiogenesis,	
	33	by I.D. Goldberg and E.M. Rosen 1997 Birkhauser. Verlag Basle/Switzerland pp. 209-232	
	54	OKANO, H. et al., "Myelin Basic Protein Gene and the Function of Antisense RNA in its Repression in Myelin-Deficient	
	, J	Mutant Mouse' Journal of Neurochemistry 1991 56:560-567	
	55	EMBL Accession No. AF091434 10/06/1999	
	56	EMBL Accession No. X86352 10/11/1999	
	57	Swissprot Accession No Y30023 10/11/1999	

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.